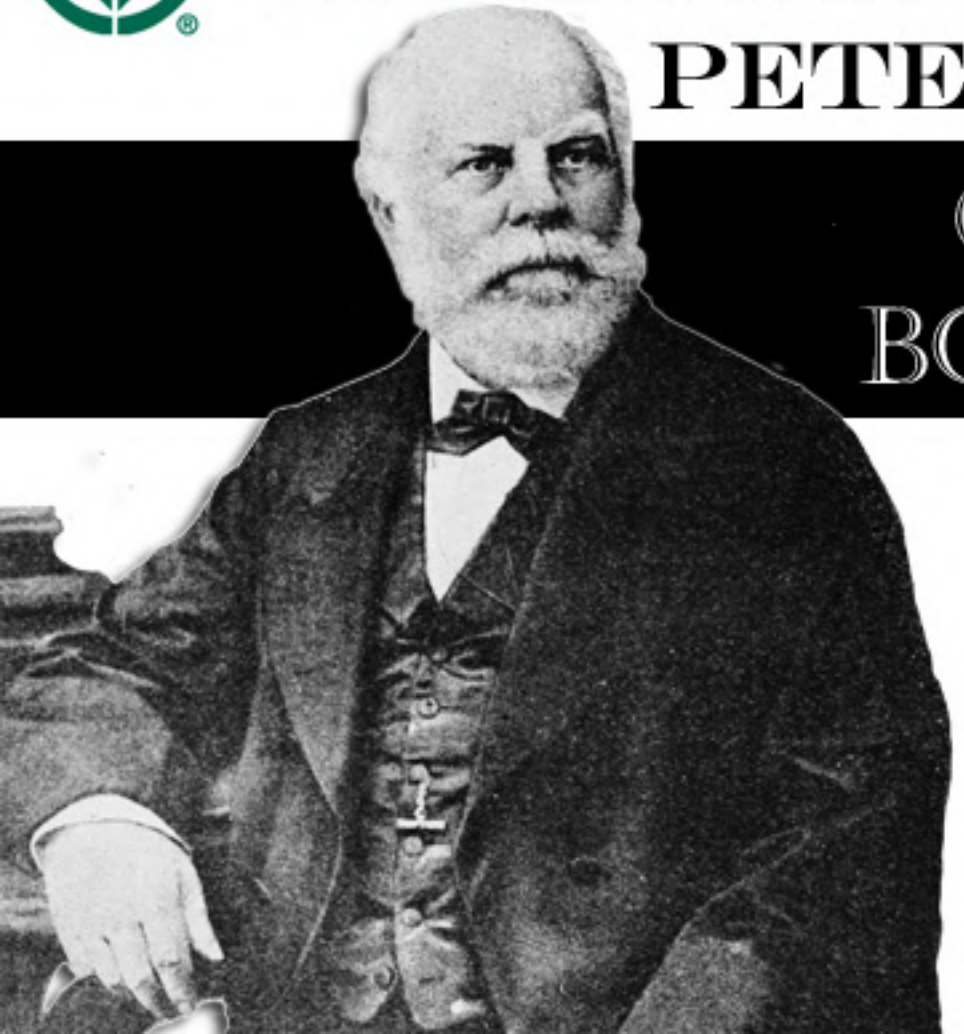
Missouri Botanical Garden

Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

E. Durkynè writes Sept 13 1876.

Q. alba and macrocarpa are very distinct in their buds from Q. Robur

Q. Prinus (in European Gardens under the name of montícola or castanea) has buds very different from alba, and very similar to Robur

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

6330

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Meehan July 1st 1876

writes

Judging (at Centennial) by bark and wood I think *Q. lobata* may be the same as *Q. undulata* and *Q. Texana* Buckley the same as *Q. rubra*

Q. Durandii Buckley = both respects distinct from all other oaks

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
copyright reserved
cm 0 1 2 3 4 5 6 7 8 9 10

of the latest European styles and never presented here before, which I am now ready to rent out at the lowest figures, at my place of business, No. 202 S. 5th Street, corner of Elm, on 2nd floor. and would most respectfully invite the public to examine the same before leaving their orders elsewhere.

Orders from the Country *punctually attended to and satisfaction guaranteed.*

Costumes of every style *always fitted for Masquerades, Balls and Parties.*

Very Respectfully,

GEORGE ENGELMANN PAPERS
MISSOURI BOTANICAL GARDEN

ELISE LANG.

1889

6331

Mutisii gen already quoted by Cavan.

Louis Née, in Anal. Hist. nat. 3. p. 264. 1802

[same translated: Lagasca quotes: "sive"

(Koen. & Sims Ann of bot. 2. p. 100

describes 16 species — Types in the Madrid Museum

Q. agrifolia
Q. Cobata

Willdenow Lin. Spec. Plant ed IV. vol IV. contains

Genera pbl. 1805

0 1 2 3 4 5 6 7 8 9 10 cm
copyright reserved
MISSOURI BOTANICAL GARDEN

CHIEF OF ENGINEERS, U. S. Army, Washington, D. C.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Office of the Chief of Engineers,

Washington, D. C., April 15, 1876.

Dr. Geo. Engelmann,
3003 Locust Street,
St. Louis, Mo.

Sir:-

There are sent you by express to day for examination, originals and proofs of Plates I

6332

Quercus michauxii Nutt. ? foliis Q. Mellichamp.

Leaves coriaceous when, 12-13 ribs on each side, strongly cross ribbed between the secondary ribs

Petioles ~~one~~ 1 inch long or over

Buds (terminal) ~~about~~ 3 lines long, more or less, five angled (when dry) with 8-9 scales on each angle - short, obtuse very slightly fuliginous, keeled, rounded, upper ones ~~flat~~ triangular cap shallow, (very knobby), scales short broad triangular at base backs of lower scales ~~off~~ sometimes bifid - ith manner of Bigelow

Buds - Curtis' specimen 4 l. long, scales same number, more rounded more caneseent

0 1 2 3 4 5 6 7 8 9 10 cm
copyright reserved
MISSOURI BOTANICAL GARDEN

RLOR AND CHAMBER

Furniture,

Rosewood, Satinwood, Walnut and Mahogany.

urtains & Upholstery

LOOKING GLASSES,

ding and House Furnishing Goods.

mboat, Hotel, Office, School and Lodge oom Furniture, constantly on hand, or made to order, of the best material, and warranted.

TERMS CASH.

WILLIAM MITCHELL, *President.* JAMES G. WHYTE, *Secretary and Treasurer.*

Saint Louis, Aug 31 187 6

Dr Engelmann

BOUGHT OF

The Mitchell Furniture Co.

FURNITURE MANUFACTURERS

AND IMPORTERS OF

CURTAINS AND UPHOLSTERY,

FACTORY, Twenty-Fourth and Christy Ave. WAREROOMS, Nos. 609, 611 and 613 Fourth Street.

Restuffing Covering Lounge			9.00	
Covering 4 Chairs		¼	3.00	12 00

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

6333

14

Annals and Magazine of Nat History Apl 1871

Descriptions of some new or little known Species of Oaks
from North West America by Rob. Brown of Campsteer

1. Quercus Sadleriana R Br Campst. (Syn Q. Garryana var ~~Virginiana~~ ?) leaf large, broadly elliptical or ovate, acute both ends, remotely serrate, nerves very prominent inferiorly, above dark green, below paler, glabrous both sides 4 3/4 inches long 2 inches wide, petiole 3/4 inch (average of 6 leaves) fruit shortly pedunculate, glans projecting more than half out of cup, small ovate, blunt-pointed 1/2 - 3/4 inch long; 1/2 - 2/3 inch diam; cup deepish, expanding, very thin; scales ovate closely imbricate, appressed, white puberent; 1/2 inch deep or less

Habitat in annual (?) Brewer got same! See my Sketch 2000 feet high
On a spur of the Siskiyou Mountains about the California boundary 42° north. Sept 1865. Shrub 4 feet high. Leaf form not unlike the chestnut-form of Q. castanea H & A. — Oersted says there is none of the American oaks which resembles it — the thin margin of the cup is very peculiar.

2. Q. Oerstediana A Br Campst. Leaf small oblong or obovate with 3-5 rounded shallow acutely cut lobes on either side, base acute, veins very prominent inferiorly, glaucous above inclining to pubescence below, dark glistening green above, paler brownish white or cinereous beneath — 2/3 by 1/4 inch, petiole 1/4 inch; glans large ovate flattened lobe, conical pointed upwards, 1/4 inch long 3/4 inch diam. cup hemispherical shallow tuberculate, scales upwards ovate, rarely subulate, covered with dense white pubescence 1/4 inch deep. — Annual Meteor

In Galetas in the Siskiyou Mountains
Approaches the group of Q. Garryana, differs in character of cup, size & character of leaves — always a shrub (Sept 1865) — very abundant fruit.

= Shrubby Garryana? Brewer got the same, see my Sketch

6334A
MISSOURI BOTANI
GEORGE ENGELMA

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

BOTANICAL GARDEN
ENGELMANN PAPERS

6334B

= Q. dumosiflora

3. Quercus echinoides. R Br. Campst Leaf perennial small lanceolate oblong-elliptical or rarely obovate, shortly petiolate serrate, cuticle or with a sinuate margin, newer dilated superiorly, above glabrous or slightly pubescent, below with cinereous down - 1½ × ¾ inch petiole 1/5 inch. Fruit short pedunculed or sessile; glans ovoid, terminating in a short blunt point, upper part covered with a dense cinereous cadrous pubescence. 1 1/10 inch long, 6/10 inch diam. Cup shallow hemispherical, densely covered with filiform stiff patulous or reflexed scales or hooklets, densely cinereous-pubescent Maturation annual (?).

Cañon Creek south Oregon and on Siskiyou Mts, 3000' Sept 1865. - A small shrub growing to a much greater elevation above sea than Q. dumosiflora to which it is allied. Kernel excessively bitter - "Hunters always look upon it as a separate species from the arborescent (dumosiflora)."

= Q. vaccinifolia ?

4. Quercus oblongifolia Torr Leaf perennial small ovate or oblong-elliptical, entire or, rarely, with a few serrations on the superior portion of the edge and commonly only on one side, glabrous above and below, glaucous superiorly, darker green above paler below, short petiolate equal at base, 1 1/10 inch long 6/10 broad. Fruit sessile "solitary at the end of the branches", gland ovate pointed covered with cinereous pubescence, 1 × ½ inch hemispherical turbinate cup, with ovate convex appressed scales which terminate in a blunt membranaceous loose point Base tomid, pubescent, covering gland about ¾. Maturation annual

In gulches among the mountains of Southern Oregon, 2000' Sept 1865 - Shrub 3 feet high, fruiting very sparingly evergreen, - Related with the New Mexican plant? closely allied to Q. grisea Liebm. - allied to Q. agrifolia, which occurs not north of 43° lat. - - - Applegate Valley [otherwise Q. Wislizeni] forms that agree with Q. Markeana Kellogg [= Wislizeni] On gravelly hillsides in the interior this tree presents still another form, Q. Wislizeni Engelm [sic!]. The acorn ripens annually

See also Oersted's Memoir on Q. agrifolia in Vidensk. Meddel. 1869. p. 59

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

= G. Garryana

6 Quercus Jacobi R. Br. Cacuyst. I will here only indicate the above species, found as early as 1863 by me in the south eastern district of ~~Colvil~~ Vancouver Island close to the house of Sir James Douglas along with its close ally G. Garryana. Leaf more pinnate with 5 lobes deeper and smaller than in G. Garryana (leaf of this long with 3 or 4 shallow almost equal lobes ~~deeper and smaller than~~ in acutifolia at the bottom

I have in the course of publication a work on the forests of North West America, with figures.

In gulches among the mountains of Southern Oregon, 2000'

6335

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

cm 0 1 2 3 4 5 6 7 8 9 10
copyright reserved
MISSOURI BOTANICAL GARDEN

Prof Liebmann Egeskovslaegten m.

Oversigt ... Copenhagen 1854. N. 5 & 6.

American Oaks

p. 169 Af de nye amerikanske Egearter meddeles her Korte Diagnoser
Of the new American Oak kinds he communicates here short Diag.

1 Q. Gambelii "Liebm." [Why?] Arbor 20–40' (Hutt.) Rocky Mts.
Gambell, Fendl. 806 809 810 b.

170. 2. Q. Fendleri Liebm. — Fol. bas. cor. lobatis, pet. oblongis, ultra
medium sinuato-lobatis, fr. pedunculat. Fendler 805. 807

170 3. Q. Drummondii Liebm. Fol. latissime obovatis, basi cuneatis
undulatis profunde sinuato-pinnatifidis, lobis obtusis
latis plus minus sinuato-sinuosis, margine
cartilagineo recurvo subtus dense tomentellis
demum glabrescentibus. fr. sessil. San Felipe, Texas
Drum 342

171 4. Q. hastata Liebm. Fol. coriacea brevipet. oblatis elongato-
hastatis tomentosis arcuatim cuneatis, amentaceis,
integerrimis s. dentatis paucis retusis utrinque
glabernimis, petiol. teret. glab. — fr. sessil.

Texas, Wright 666. [2 sheets + HC Gray] Syn. Q. virens [= Emoryi!]

5 Q. grisea Liebm. Folii coriacei cuneatis brevi-
petiolatis ovatis obtusis vel apiculatis coriaceis
integerrimis supra pallide viridibus subtus stellatis
adspersis, subtus flavescenti-virentis dense pubes-
centibus, petiolis teretibus tomentosis, fr. pedun-
culatis tomentosis

Texas & El Paso Wright 665. [3 sheets]

6 Q. pungens Liebm. Fol. coriacea brevipetiolatis ovatis
s. oblongis obtusis s. obtusiusculis bl. min. sinuato-dentatis.
dentibus inaequalibus latis apiculatis pungentibus
patulis v. divergentibus basi obtusis v. leviter
cordatis v. cuneatis, supra pilis stellatis adspersis
nitidis laete viridibus, subtus incano-tomentosis,
petiolis teretibus demum glabratis; fr. sessil. oder
capitulo hemisph. dense tomentosis.

& N. Mex. — California Lobb 106. Wright 664. Texas
[3 sheets]

0 1 2 3 4 5 6 7 8 9 10 cm
copyright reserved
MISSOURI BOTANICAL GARDEN

6336A

MISSOURI BOTA
GEORGE ENGEL

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Liebmann, contin.

6336B

BOTANICAL GARDEN
ENGELMANN PAPERS

p. 172 7. Q. barberi Difolia Liebm foliis coriaceis breviter petiolatis rotundis vel ovatis utrinque rotundatis mucronato-dentriculatis margine cartilagineo plano, supra nitidis glabris seu costam puberulam flocculosis, subtus pruinoso-glaucescentibus pilis stellatis brevissimis adspersis, petiolis puberulentibus fruct. sessil, cupula depresse squamis deorsum tomentosis fol 11-14" lg 5-10 lat

[I have a fragment of] Californ Coulter 661 Fremont 1843-44 - Rocky Mt - No Fremont sp. in HC Torrey which could be referred here thy all belong to quercus

" & Q. lobata Née Liebm Hartweg 1964 Calif [Sonoma

173 9. Q. Chrysolepis Liebm — fol jun subtus aureo-pulverulentis — petiol compresso, fructibus in apicibus ramulorum sessilibus. Hartweg. 1962 - Fremont - 1066. Calif -

" 10 Q. Neali Liebm. fol membran. petiol late-dorsaliter alluvis basi late — cuneatis v. subcordatis undulato-profunde sinuato-pinnatifidis, lobis obtusissimis integris v. sinuato-dentatis margine cartilagineo reflexo supra nitidis glabris subtus incano-flavescentibus puberulis, petiolis supra glandis puberulis. fruct sessil, cupula depresse patelliformi, glande globoso-ovoideo apice impressa apiculata nitida

fol 2-3½" lg 1-2½ lat — cupl 3×9,"' gl. 12-14" alt. 10-11 diam.

— Calif Hartweg 1965. [1] affinis Q. Douglasii

[Q. Douglasii var. ? Neali DC. Prod. p. 24
Q. Douglasii" Benth PL. Hartw. : arbor 40-pedalis, foliis

. The following, Nos 11—52 are Mexican Species

[1] Hartweg 1965 = 46 Gray is = deeply lobed Garryana with large tomentose buds, thickly scales of cup

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

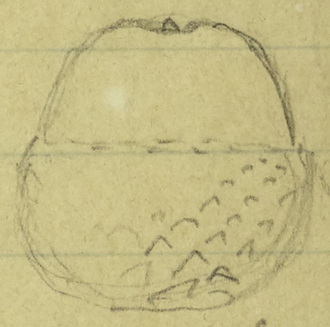
Cambridge Mass Oct. 17 1876

Quercus alba a form for Bebb, Fountain dale with
leaves, runcate attenuate at base, lobed & deeply
lobed upwards

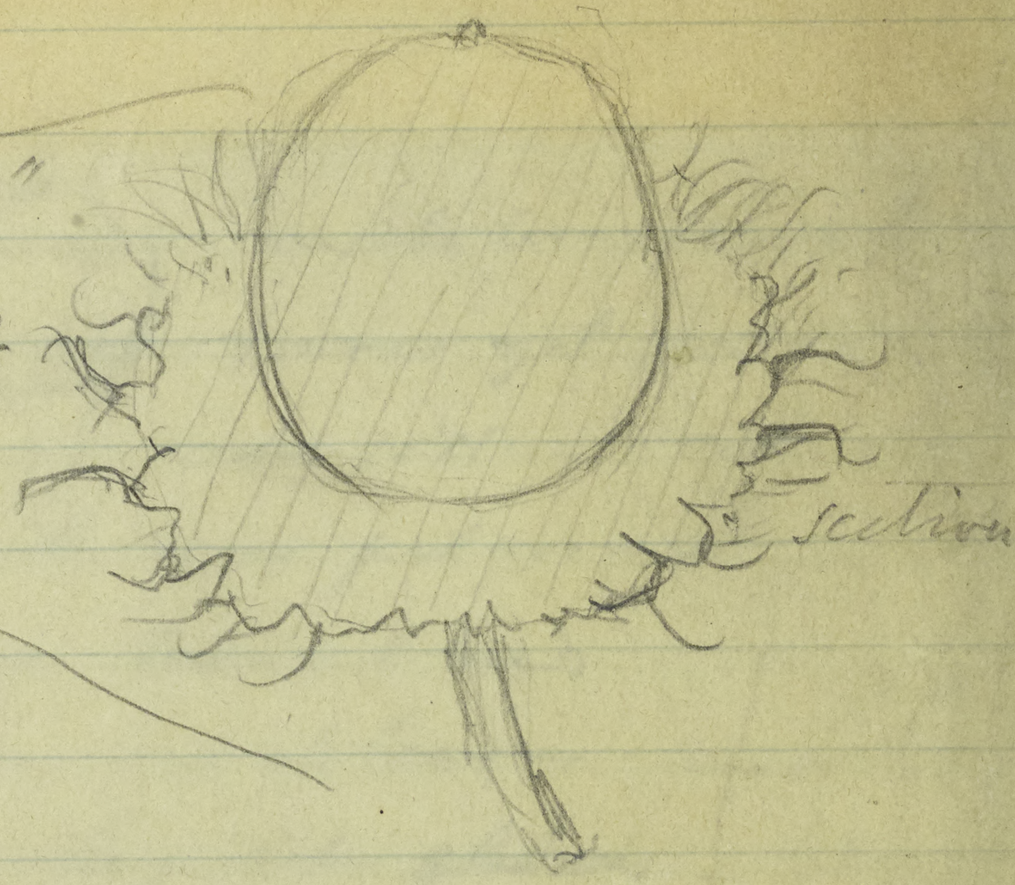
& one tree near Soldiers Home, Washington
2 Valley 1870 sessile acorns of White oak, but leaves runcate
sublate, and slightly stellate-pubescent below.

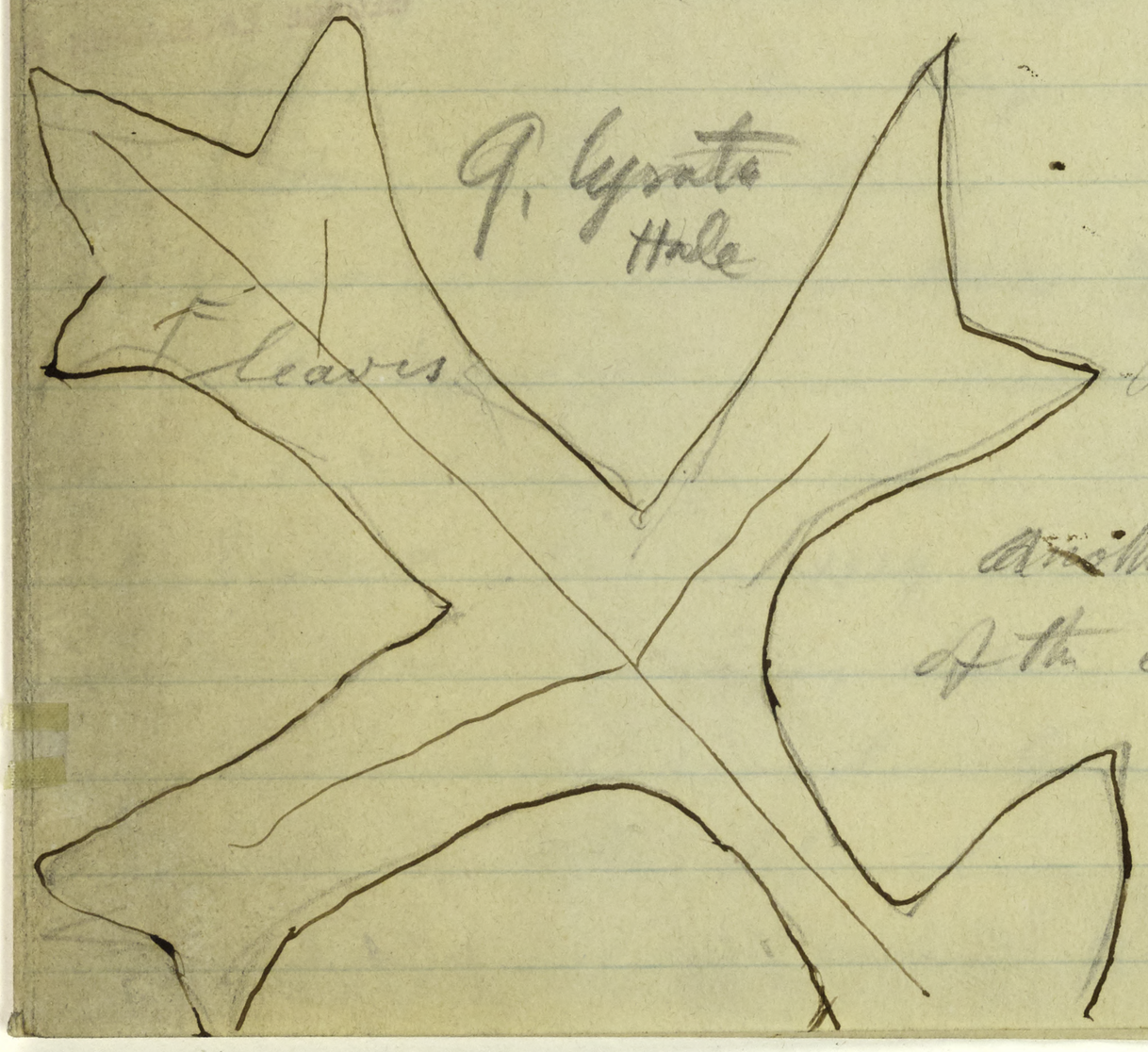
Q. aquatica "the only oak on Lake Superior" Robbins 1862 (Minn!
Smooth, 11 to 5 lobed
Quercus Aquatica Pylaie is tomentose in fruit - leaf apparently entire
but buds are taper and gray Robbercent

Oak no 2 Memphis, Tenn Nov. 1852

is Q. lyrata with cup covering the acorn not  much
more than ½. Q. lyrata, Louisiana, Hale has more deeply lobed F
Quercus obtusiloba for Saskatchewan Bourgeau 1857 is the
smallfruited macrocarpa

Q. macrocarpa — Q. new species
of Cincinnati, D. Christy Dec 1862
Pinckneyville, Perry Co, Illinois





& cups covering the cup
for Memphis
acorn specimen of Rankins has some
of the cup scales with foliaceous tips
approaching macrocarpa

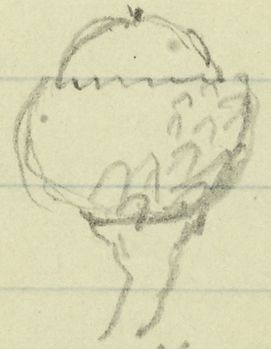
0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

6337

MISSOURI BOTANICAL
GEORGE ENGELMANN

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

L TWEEDEN
N PAPERS

Q. tomentosa, New Haven, Eaton 1857  "cupula hemisphaerica"
pubescence just disappears — twigs yet visible
Q. tomentosa Va — Curtiss Oct 1871 — cut off.
leaf oft = subsp, oft yel with so — pubescence
all tomentosa have large tomentose terminal buds
Q tomentosa R. I., Olney, has also cut off leaves more like
Q. coccinea, Oakes Mass buds large cut glabrous — lobes of
leaf divaricate — Madison, Pk(c) — undoubted coccinea with
buds of same size, but
Q. tomentosa St Louis 1849 with long caused buds
Q. coccinea Winnipeg Lake Bourgeau 1859
Q. tomentosa S. Canada Curtis
Q coccinea Rh. Isl. Olney buds small but caused
others ibid. have round glabrous buds

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Q. coccinea Tourtelotte, Bebb 1870 with very small pedatisecta like leaves — Bebb comes Keeney — same Vasey, Aigner

Ringwood Vasey 1862 with large but very deeply lobed leaves, almost bipinnatifid, middle ones only 3–4 lin wide — small glabrous buds

Q. Prinos with large pedunculed fruit, (very true Prinus) Rh. Isl. Olney 1873

glabrous Castanea leaves, long glabrous buds Bebb sp — but fruit Castine. Va. 1871 same with obovate large downy leaves glabrous

Q. O. Georgei, Meisler, only fruit

probably Muehlenbergii

Bebb very large — oblong or base

Louisiana Hale in the

fruit subsessile, leaves bud large, like

Muehlenbergii — oblong or cordate base buds glabrous

Dr John F. Hiester Reading Pa 1851 sends a lot of different Prinus 1–8 from same locality

2. 5 & 6, small pedunculed acorn — large ovate obtuse leaf

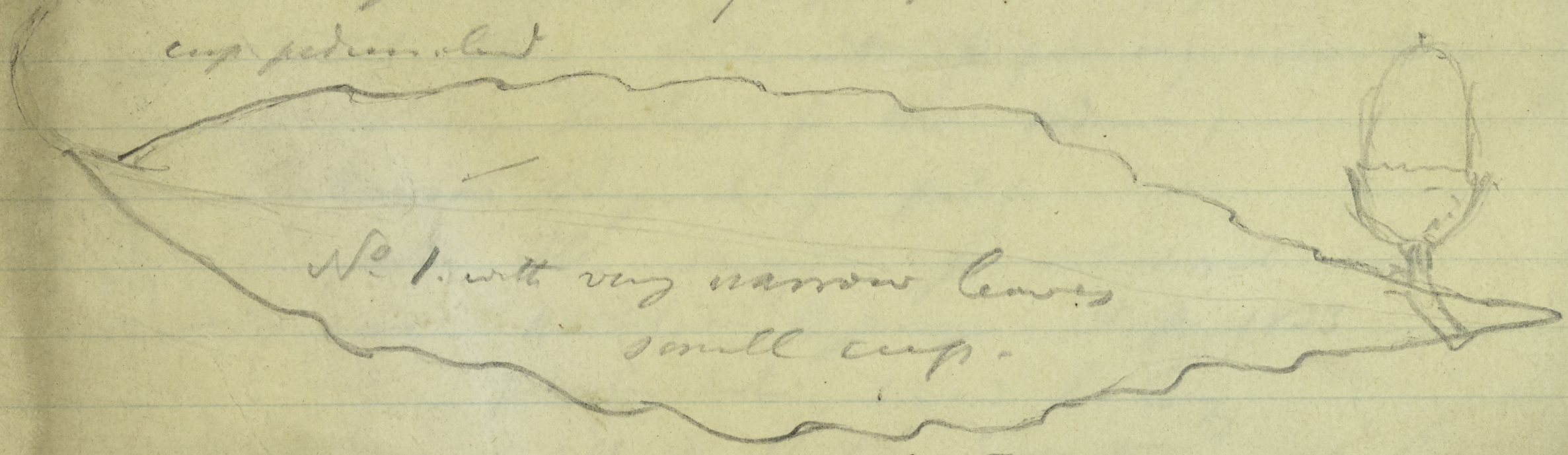
3. at base — in 3rd still slightly pubescent

4. 10 has a little longer fruit, otherwise the same

(a flowering sp. from locality: small glabrous, leaves

11 is a very broad leaved form of same, acorn a little long

cup pedunculed



No 1. with very narrow leaves

small cup.

others have

stronger dentation

all — ± oval slightly pubescent

Prinus Seneca Lake N.Y.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

6338

MISSOURI BOTANICAL
GEORGE ENGELMANN

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Q. Prinus "monticola" & "acuminata" & Ph. Isl Oaks
are all forms of true Prinus

Q. O. Muehlenbergii Muellenberg. } terms obsolete / coordate mostly
Hale, Lowe. is the same } cups pedunculed short
Jenter, Memphis known central Cove, Shite on each
cup sessile

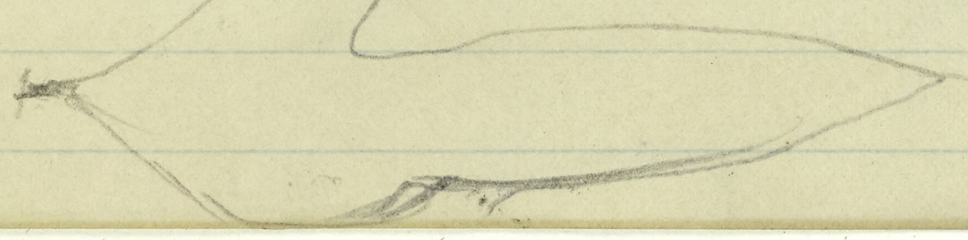
Quer. castanea Ready, D Hiester "is very uniform in its foliage
its bark and growth, too, are strikingly distinct, bark much
like Q. alba." cups pedunculed, or sessile buds nearly glabrous and
Q. prinoides "with little acorns under the scales" Rhode Island
cups with obtuse very knobby scales leaves of previous
more retuse lobed
above the Prinus?
Leafy Gulls (Ste Vrey's) for New Haven
buds very small (a) oval, nearly glabrous

Q. rubra microphylla = palustrifolia Bebb, Fort Dodge Ver. No 10
buds oval rounded, nearly glabrous small
— — coccinea foliis Bebb No 5. — larger leaves & acorns. same buds

— Bebb 44 = 5

— Bebb 44 is true rubra with a little deeper cups & oval bud
— Bebb 45 is normal rubra, buds lanceolate

Q. castanea Hale, La, & Chap. Florida on both like the
St Louis plant. Chapman says: I doubt if you have it northward
— Central Ohio Sullivant (fr. pedunc.) (also with exc. of cup.)
— Memphis, Tenn Fowler (fr. brev. pedunc.)
— Arkansas Bezpich (fr. ped.)
— Augusta Ill. Mead for subsessile
Q. imbricaria Middletown N Jersey A. Gr. 1833
peduncles short, 2½-3 l. long
"Q. Phellos" Norfolk Va. Curtis, "yoke tree" with brown,
soft deeply lobed
lower part



0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Q. Phellos, Santee Canal Raven — 40 shoot?
leaves 5 inches by 1 wide, petiole 3 or 4 l. long

Q. — "with young leaves white downy beneath" Wilmington Co

Q. heterophylla C. E. Smith Camden + one plant

— — Tiniicum hs obsessile, roundly lobed leaves

— — Vt Holly N.J. ("Buckleys Conbity") in plant

— — 609 Hall Texas, may be Phellos × palustris

— — Hariskellos Guide, Okeston Co Pa, near Ck Buckley
with shorter petioles & less distinct leaves

Q. cinerea leaves 5 × 1 inch — petiole 4‴ Louisiana Hale
fid larger than usual — underside of nerves

sp Q. heterophylla D. C. Obesity Otheron I, "first generation" leaves
oval or oval large leaves with few coarse teeth
(incisions rubra?)

2, "second generation" back to fed Light — wildly rubra
with juvenile and adult (fully formed rubra) leaves

sp Q. Leana Nuttall Swallow is correct,

Q. Durandii Buckley Hall 574 Austin May 20 Some forms appear
identical Q. rubra, others have broader leaves with few obtuse
lobes — others nearly entire obtuse leaves

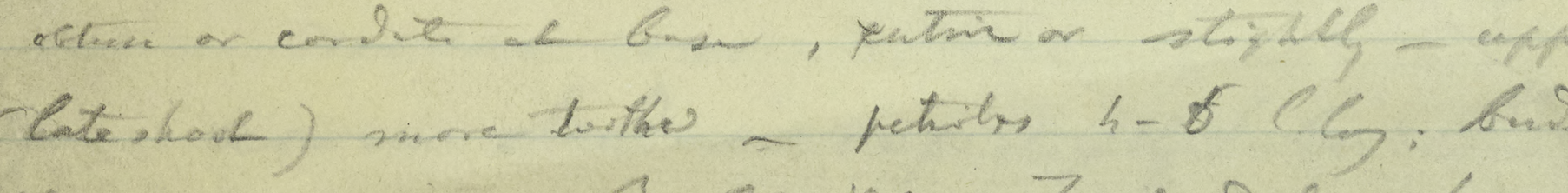
Q. nigra has very small, nearly globose buds

sp — — Sandhills Columbia S.C. leaves 4 × 1½ inches ovate-lanceolate
obtuse or cuneate at base, petiole stout — upper ones
(late shoot) more toothed — petioles 4-6 Cl. buds

Q. alba-marmorea 6 de 66 № 24 Fruit like No. leaves
of marmorea fruit of alba

— — — № 27 has leaves a little more like alba, but
petiole, acorn like South marmorea

Q. Nigra falcata has mostly smooth cups, acorn somewhat
tuberculate (Only 2 nuts sp?) Nuts as much as 2 largest.



6339

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Sp Quercus Texana Buckl 340 (341) = Durandii —
especially the former; 341 comes nearer Q. undulata var
Q. coccinea var tinctoria № 6 Bebb, Clute Bot. is a regular
small leaved with large, tubiate cups, and peduncles ½–¾
all bely inch long
to rubra № 8 is large fruited, small-leaved also peduncles ½ inch
20 is small leaved, cup deeper, approaching coccinea
as also the leaves of
13 is somewhat
arom 11 is coccinea or perhaps with tinctoria, with large buds
leaves intermediate between both
7 "coccinea var" is the regular small leaved form
Sp 18 same leaves, but turbinate deep cups tuberculate
"depauperate coccinea" with small acorns might be
a hybrid between coccinea & palustris
arom 12 regular coccinea with deep cups covering
½ of acorn
arom 13 is a coccinea with something of
rubra in the fruit
arom 21 large lf very deeply lobed leaves &
small long acorns palustris-coccinea?
arm 54 acorn large, cup tuberculate leaves of coccinea
" coccinea var
arm 9 acorn slender cup slightly tuberculate — acorn-leaves

Quercus Bourgaei Oerst near Q. crassipes H&K both collected
by Bourg both biennial

Q. rigida small, cup peduncles large rough oval leaves see Gregg
thorny reticulate, lobes truncate
Q. Bottgeri 258 no name has Chestnut leaves with small but
long awned teeth — biennial. on rubra

9 rotulos with log pencil fi aborts short
petioled Cavs Liebm

HBK. Nov Gen et Vol 2 p 6

Quercus confertifolia HBK. N. reg. 2. p. 53. t. 94

Ramulis abbreviatis, foliis brevissime petiolatis confertis lanceolatis acuminatis mucronato-aristatis integerrimis coriaceis, margine subrevoluto, subtus pubescentibus, fructibus subsessilibus

Arbor 15-20 ped. semperviren — folia — basi rotundata — venis parallelis apice bifidis subtus prominentibus — supra glabra nitida, subtus prasertim in venis pubescentia 2-3 pollicaria 5-8 lin lata. — Cupula — squamis arcte imbricatis membranaceis extus ciliatis pubescentibus (Bonpland)

Inter Queretaro & Santa Rosa 1200 tois alt

[Woodcut]

In Humboldt & Bonplands Plant Aequinoctiales vol II tab 75—131 24 new species of oaks are figured — the same that are described in Nov Gen vol II p. 7—15.

no other oaks are mentioned in Nov Gen but these 24 sp.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

6340

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN